

# *Nano*STRUCTURED MATERIALS

(An Acta Metallurgica, Inc. Journal)

## VOLUME 1, 1992 CONTENTS AND AUTHOR INDEX

### *AIMS AND SCOPE*

Advances in high performance materials for a variety of applications will increasingly depend on our ability to control the size, distribution and morphology of their constituent grains and phases at the nanoscale level (less than 100 nm). Capabilities for synthesizing such nanostructured materials are becoming available, so that it is possible to produce the quantities of materials needed for prototype development and testing.

The primary mission of the journal for *Nano*STRUCTURED MATERIALS is to provide an international and interdisciplinary forum for the effective dissemination of scientific and technical information on the synthesis, processing, theory, computational modeling, structure, properties, performance and applications of nanostructured materials. The materials of interest include metals, ceramics, polymers, semiconductors, superconductors, and magnetic, optical and electronic materials, and their composites. Synthesis routes of interest include chemical and physical vapor deposition, mechanical milling, gas phase pyrolysis and condensation, electrodeposition, cryochemical synthesis, laser pyrolysis, gel synthesis, and other methods with applications for structural materials, coatings, thin film devices, membranes, catalysts, sensors, etc.

The following are major areas of concentration of the journal:

- Clusters and cluster assembled materials;
- Ultrafine powders, thin films, coatings, multilayers, and fibrous materials
- Structure and characterization of nanophases;
- Synthesis and processing of nanostructured materials: physical, chemical, mechanical, and biological methods;
- Properties: mechanical, electrical, optical, rheological, magnetic, etc;
- Performance and applications: tribology, corrosion, etc;
- Related fields such as: nanolithography, nanodevices, etc.

*Nano*STRUCTURED MATERIALS will rapidly publish research papers and regular invited review papers on scientific and technical issues in this rapidly evolving field. The journal will strive to maintain an international representation in published papers, and will, from time to time, co-sponsor regional, national and international meetings.



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